

The Construct of Learning Differences

Attitudes are the real disability

-Henry Holden

ow do we view the notion of disability? Most of us take the term for granted, but how is it relevant to persons with *learning differences*, a term not used in the law, research, or diagnostic manuals? Ultimately, we want our children to enter into adulthood with self-awareness and personal autonomy. Identifying people with learning differences as disabled influences the way we perceive and act toward them and the way they perceive themselves. The story of why we call children who learn differently *disabled* comes from many different areas. The term *disability* is more than a medical, psychological, or educational issue; it has roots in politics, economics, and our culture. If we desire to empower students who learn differently to succeed in life, we need to understand how we came to our current place of identifying and teaching students with learning differences as learning disabled.

A FUNDAMENTAL QUESTION

It is critical to begin any discussion of working with students who learn differently by addressing two fundamental questions for all teachers, parents, and students themselves: What do we mean by learning *differences*? How are they similar to and different from learning *disabilities*? As teachers

know, students take on all shapes and forms. Our use of the term learning differences, first and foremost, is intended to represent the spectrum of individuals who have the ability to live independently and who learn differently. The term *learning disability* traditionally refers to individuals who, in spite of their average to gifted abilities and a potential to learn, have difficulties meeting expectations of achievement, particularly in a school setting. They have difficulty learning how to read, write, or do mathematical calculations as well as carry out executive functions and other skills. The atypical challenges these children and adults face every day are not readily noticed by others the way one may notice a person with blindness who uses a cane or a person who uses a wheelchair. In this regard, the disability is hidden or invisible. Therefore, unlike disabilities that are diagnosed soon after birth, the presence of a learning disability may not be recognized until the academic demands of a general education classroom become inordinately hard to attain without additional support. These students need the support because they learn differently.

Many eventually are diagnosed and identified with a specific label. Students with these diagnoses typically learn and demonstrate their knowledge differently to such a significant level that they are identified as having a disability (most commonly under the categories of Specific Learning Disability, Speech and Language Disorder, or Other Health Impaired) under the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. In our educational system, labels play an important role; the use of the term *disability* is needed in order to qualify for the services offered in an Individual Education Program (IEP) and other services. However, for a variety of reasons, many students who learn differently do not meet specific eligibility requirements to be identified as having a disability. For these individuals, support may be withheld, at the child's expense. We question the fairness of withholding services for students with learning differences who do not meet eligibility criteria as disabled but certainly deserve special support. Because the intention of this book is to address the needs of a wide range of students with mild to moderate learning needs as well as those who are ineligible for services but who indeed learn differently, we use the term learning differences.

A PARADIGM SHIFT TO A STRENGTHS-BASED MODEL

We prefer to use the term *learning differences* rather than *learning disabilities* because of the meanings commonly associated with the latter label by many outside of special education. Many laypersons lack knowledge about learning disabilities and believe that a learning disability and developmental

delay are synonymous. Because of the invisible nature of cognition, some might think that these students are lazy or unmotivated or that their parents have false expectations of success for them. In some instances there may also be a perception that these students and their parents are gaming the system to receive accommodations on high-stakes tests that will provide a competitive edge on college entrance requirements. All of these assumptions about individuals with learning differences are false. We must ask ourselves what the benefits are of teaching children to own a label of disability that is not accepted or readily understood by the general public and even many teachers. Diagnoses of disorders that are traditionally school-based deficits are generally diagnosed before college. Therefore, over time, some students with learning differences are often tempted to leave their label of disabled behind. Many believe their learning differences will not have an impact in college, work, relationships, and, especially, feelings about themselves. Many do not want to be associated with a label that has made them feel less than adequate. By minimizing the term disability and broadening our scope to learning differences, we believe we promote the transition to a new era of education. While doing so, however, we still believe in the continuum of services, accommodations, and settings that must be allowed for all individuals who are eligible for special education.

We are at a crossroads in education where access to instruction through technology, the Common Core State Standards (CCSS), and Universal Design for Learning (UDL) suggest we change our notion of disability to one of differences. Doing so allows most children to learn successfully in general education classrooms and to learn more effectively in resource rooms. Technology is changing the very way we see the world, each other, and ourselves. It is rapidly breaking down barriers that have thwarted the progress of untold numbers of students with learning differences. The CCSS offer opportunities to minimize the separateness of students with learning differences. It encourages students with learning differences to take on the academic content standards formerly reserved for students without disabilities. The UDL framework minimizes the concept of disabilities in the classroom. It emphasizes instructional approaches that work for all students instead of a traditional model that compartmentalizes instruction into two categories: traditional approaches for "normal" students and special approaches for students with disabilities. In short, UDL levels the playing field. It counters the marginalization of students with learning disabilities and other labels. We all learn differently to one degree or another and have learning preferences that are invariably our learning strengths. As we embrace UDL as part of the CCSS, there is a need to minimize the relevance of categorical distinctions and emphasize learning strengths.

CCSS and Students With Learning Differences

Margaret J. McLaughlin, the associate dean for research and graduate education at the University of Maryland and former president of the Council for Exceptional Children (CEC), believes that implementation of the CCSS can inclusively respond to the unique and varied learning needs of students with learning differences. She recommends a number of practices to help support students with disabilities and create an inclusive environment where differences rather than disabilities will drive instruction and assessment. We have extracted the following nuggets of wisdom and blended them with some of our ideas but recommend checking out the full article (http://www.naesp.org/principal-septemberoctober-2012-commoncore/access-common-core-all-0).

- Teachers must recognize that every student with learning differences is unique and needs an individualized approach.
- UDL is the best way to accomplish the goals of providing multiple means for all students to learn within their individual needs.
- We know of methods that work (i.e., best practices). Use them!
- Teachers and the administration should find ways to monitor student progress toward meeting CCSS throughout the year and not rely exclusively on once-per-year high-stakes testing.
- Goals on IEPs can and should be aligned with CCSS.
- We need the best teachers we can find. School systems that invest in high-quality teachers will serve students with learning differences (and all students) well.

Rather than try to change the way students with learning disabilities learn, we are beginning to change environments so that all students can learn. If students who have failed in traditional educational settings subsequently find success in different ones, what is the relevance of the label learning disabilities? We have the opportunity to shift to a more positive strengthsbased model by providing teachers with a multitude of ways to allow children and young adults to experience education. Although learning differences make learning exceedingly difficult in specific ways, these students have strengths in areas typically not noticed in school. These include visualization, analytical thinking, analogous thinking, awareness of the environment, and narrative thinking. Use of the term learning differences allows us to adopt a strengths-based model that embraces the whole child.

HISTORICAL PERSPECTIVES

In order to build a better context for our understanding of learning differences, a quick look at the history of the field of learning disabilities provides valuable insights. Even though the realization that some people learn differently and do better with specialized instruction took root in the 1930s, schools did not offer mandated services until 1975. Even by that time, learning disabilities were best conceptualized by what they are not rather than by what they are.

DEFINITIONS OF LEARNING DISABILITIES: HOW MUCH DO THEY **MATTER?**

The timeline of learning disabilities leads to a somewhat bizarre conclusion. After a century of exploring the issues of children who learn differently, a lack of consensus persists on the very nature of learning disabilities. Hammill (1990) wrote about the eleven most common definitions of learning disabilities. No one agrees on what they are. The federal definition drives evaluation and identification of learning disabilities (Specific Learning Disabilities, U.S. Office of Education, 1977). It includes

- a disorder in one or more of the basic psychological processes,
- perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia; and
- excludes children who have learning disabilities which are primarily the result of visual,

A Brief (and Incomplete) Timeline of the History of Learning Disabilities

- 1917: James Hinshelwood, MD, popularizes the term word blindness to describe some of his patients who, in spite of normal visual acuity and intelligence, had significant difficulties reading.
- 1920s and 1930s: Samuel Orton terms this reading condition strephosymbolia, derived from his observation that many of the children he studied made reversals or transpositions despite average or above-average scores on the Stanford-Binet IQ test. The phenomenon is commonly referred to as dyslexia.
- 1940s and 1950s: Alfred Strauss, Heinz Werner, and Laura Lehtinen's work with brain-injured soldiers results in Strauss Syndrome: abnormal responses to environmental stimuli, distractibility, perseveration, higher levels of motor activity, hyperactivity, disorganized behavior, perceptual disturbances, and motor problems.
- 1963: Samuel Kirk proposes the term *learning disabili*ties to describe children with reading and other difficulties, based on theories of minimal brain dysfunction and perceptual-motor deficits.
- 1970s to present: A lack of consensus continues on the definition of learning disabilities. The majority of learning differences do not conform to the educational criteria of diagnosis and subsequent services.
- 1993: Mel Levine and others conclude that definitions of learning disabilities are vague, describing what a learning disability is not rather than what it is.
- 2000s to present: Controversy over assessment and eligibility for special education increases with the development of Response to Intervention (RTI) models. The validity of the construct of learning disability is attacked and successfully defended by researchers, advocates, and the National Joint Committee on Learning Disabilities (NJCLD, 1991).

hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage.

The IDEA 2004 guidance governs identification of students who have a severe discrepancy between achievement and intellectual ability or who do not show a response to structured interventions as having learning disabilities. The documentation of the discrepancy in the model usually involves a comparison of some kind of test of cognitive ability (usually the Woodcock Johnson Tests of Cognitive Ability-IV or one of the Wechsler Intelligence scales) with tests of achievement (e.g., Woodcock Johnson Tests of Achievement-IV, Stanford Achievement Tests, Wechsler Individual Achievement Test-III, or Kaufman Test of Educational Achievement-II).

The discrepancy issue is controversial if not contentious and, in recent years, has fallen out of favor as a requirement for special education services for individuals with specific learning disabilities. The conjecture that a discrepancy between aptitude and achievement constitutes a learning disability is just that—a conjecture. The aptitude-achievement discrepancy model was an attempt to operationally define how big the discrepancy must be in order for a student to qualify for special education services under the category of Specific Learning Disability. It has been widely misapplied, and little attention was ever paid to the laws that allowed a school district to professionally qualify a student based on need, even if the discrepancy was not met (Ofiesh, 2006). Consequently, states use different criteria for determining what constitutes a "significant" discrepancy, meaning that a child may have learning disabilities in one state but not another. Those who qualify typically receive an IEP. Some others labeled as emotionally disturbed or who have intellectual deficits also qualify for the IEP or 504 plan. Most other students with significant learning difficulties do not have an IEP and do not receive the learning support, remediation, and accommodations that go with it. Their testing does not reveal enough of a discrepancy between ability and achievement. They are not failing enough. The need to fail smacks of educational and social injustice.

A second problem with the aptitude-achievement discrepancy is that too frequently a critical aspect of the construct of a learning disability is ignored: a disorder in one or more basic psychological processes. This disorder in a basic psychological process (e.g., oral language ability vs. rapid naming ability) is at the root of the learning disability and helps to illuminate why the individual is struggling in math, for example. Many diagnosticians overlook this important aspect of the federal definition and instead devote much of the evaluation to calculating the discrepancy between aptitude and achievement.

This reality gives a compelling argument for the use of *learning differences* rather than *learning disabilities*. The category of Specific Learning Disability excludes countless students with significant learning differences who do not meet eligibility criteria. These students may get some support through what is called a 504 plan, but many do not get the support that could make a significant difference in their educational outcomes. Rather than getting

hung up on a label, we should focus on the much broader array of students with learning differences. They too need accommodations, instructional adjustments, clear learning goals, and meaningful assessment.

From our perspective, the NJCLD offers a definition that describes this phenomenon and postulates reasons for it. A number of different perspectives inform this definition of *disabilities*. Here are the major points:

- Uses a general term that refers to a heterogeneous group of disorders: significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities
- Is intrinsic to the individual
- Presumes central nervous system dysfunction
- Occurs across lifespan
- · Acknowledges that problems with social perception and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability
- Excludes children who have learning difficulties due primarily to other disabilities or cultural differences or insufficient or inappropriate instruction. (NJCLD, 1991)

The first part of this definition is noteworthy: The first thing to know about learning disabilities is that it is a "general term" and a "heterogeneous group of disorders" (p. 20). To break this down into the vernacular, learning disabilities is a general way of cataloguing almost all the kinds of difficulties people can have with learning! Consequently, it is a matter of some debate whether these difficulties are truly disabilities or rather part of the overall spectrum of human differences.

The NJCLD definition does include several tenets that try to give more specificity, particularly the attention to the disorders being "intrinsic to the individual, presumed to be due to central nervous system dysfunction" (p. 20). Essentially, this phrase indicates that children are born with their particular learning styles. At some level, their brains are hardwired to process information differently than many or most of us. The majority of persons with learning differences, whether diagnosed or not, will tell you that they have been this way as long as they can remember. Their distinct ways of approaching tasks, learning, and the world are more rooted in nature than the environment. They will also tell you that their learning differences persist through adulthood.

As with most definitions, it does a better job of explaining what learning disabilities are not. "Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability" (p. 20). Self-regulatory behaviors

describe attention deficit/hyperactivity disorder (ADHD). A debate within the committee ensued regarding whether ADHD should be included in the definition. This rather technical distinction resulted from both social and theoretical ideologies. Whatever the objection, distractibility, inattentiveness, and inattention have a pronounced negative effect on learning and achievement. Students with ADHD who qualify for an IEP fall under the category of Other Health Impaired.

The professional community in the field of learning disabilities has recognized the term *nonverbal learning disabilities* (NVLD). Representing the National Center for Learning Disabilities on its website (http://www.ncld.org), Sheldon H. Horowitz, EdD describes the characteristics of NVLD as including difficulties with understanding social nuances such as sarcasm or how to ingratiate into a conversation, general social awkwardness, and incessant talking. Many of these behaviors reflect a seeming social obliviousness.

From our perspective, NVLD are learning differences. Understanding the social world of human interactions is the basis for functioning effectively in our environment, which includes achieving in the classroom environment. Lending credence to this observation, the Learning Disabilities Association (LDA), formerly the Association for Children with Learning Disabilities (ACLD), incorporates social perception as a primary characteristic in its definition (ACLD, 1986).

Many K–12 educators do not see social perception and nonverbal language as part of the curriculum or their teaching responsibilities. However, more and children struggle with what is known as the *hidden curriculum*, the complex system of rules and behavioral expectations of school culture, because of these difficulties (Giddens, 1972). It is often up to parents and well-informed teachers to implement social skills or language development training in schools. Many programs are available. We will review a number of these in Part II of this book.

Countless children and adults go undiagnosed. In some cases, they do not have sufficient advocacy to request testing, lack the resources to get tested, or are dismissed as simply underachieving because of skin color, ethnicity, or English as a second language. A recent conference on dyslexia and minorities revealed an overwhelming number of children of color who are untested and undiagnosed (Bowen, 2013). Fair and accessible assessment is an issue of civil rights; barriers to receiving accommodations and services cause a kind of double marginalization for minority children. Later on in life, many of these young adults must pay for costly diagnostic evaluations to substantiate a request for accommodations on tests standardized college admissions tests or professional licensing exams. Some must settle for unaccommodated test scores that do not reflect their true skills and

knowledge because they cannot afford the documentation, perpetuating a cycle of discrimination and lack of opportunity.

Increasingly, the RTI model or Multi-Tiered System of Support (MTSS) for determining whether learning disabilities exist has gained favor in research and, to a lesser degree, practice. Formerly, students who were suspected of having learning disabilities went through a cursory screening followed by testing for diagnosis with the ability-achievement discrepancy model. RTI places much greater importance on systematically trying different modes of instruction. Many students with learning differences do better when teachers find ways of meeting their individual learning styles with research-based instruction. RTI reduces the traditional reliance on testing and evaluation, is available to greater numbers of students, and increases the opportunities for students with learning differences to succeed. While RTI holds significant hope for early intervention, it should not be used to determine eligibility for services under an IEP. Without diagnostic testing that allows us to truly understand an individual's strengths and needs, individuals with learning disabilities may never understand their learning differences as well as their strengths (Ofiesh, 2006).

DIFFERENCES, NOT DISABILITIES

Disability is the fundamental term and the bedrock of the philosophies, policies, and practices embedded in the IDEA. The concept greatly influences political, social, economic, and cultural systems. It owes much to the field of abnormal psychology as well as social Darwinism and general intolerance of anything that does not conform to traditional beliefs and economic productivity.

This philosophy distorts the "survival of the fittest" axiom from the theory of evolution and applies it to our social interactions, expectations, and opportunities. In social Darwinism, those who are successful have achieved because they are strong; those who do not are weak. In fact, their weaknesses doom them to extinction. People who fit this category deserve to be marginalized because they do not contribute. They are inferior and often labeled as disabled. Sometimes it is obvious why they are labeled as weak or inferior: They are blind or deaf or have physical limitations.

From the beginning of human history, being able to see, hear, or walk was critical to survival. Vulnerability was disability. Physical and sensory disabilities were (and are) obvious. As the need for a literate and educated populace has increased, we have now deemed problems with literacy and learning as a detriment to social progress—and hence as disabilities. Disabilities have arisen as the needs of society have changed. We test shortcomings in terms of IQ or learning or social behavior to tell us whether someone, particularly a student, is weak or inferior.

In order to decide what is abnormal, we need to define what is normal. Psychologists have a way to do this, interestingly rooted in the work of Francis Galton, a cousin of Darwin himself. Galton noticed that on virtually any human characteristic, about two thirds of the population were pretty similar to each other, but as the characteristic became either greater or smaller (e.g., height, weight, athletic ability), the numbers started to drop dramatically. Only a small number of the population wound up at the extreme end or tail of the distribution. This phenomenon resulted in the creation of the bell curve or normal distribution. Psychologists found that when they measured attributes such as intelligence, the same distribution occurred. When they used the mean score and then calculated the average variation (or standard deviation) from the mean, they found that about two thirds of the persons taking the test scored within this range. The most common score was the mean or close to it, with progressively fewer people getting scores that deviated from the mean. The 68% of the population who scored within one standard deviation were considered normal or average; the 14% within the next deviation both above and below the mean (a total of 28%) were called high average and low average respectively; and the remaining 2% on either end were called *abnormal*. It is still a bit of an inside joke to say, "That dude is more than two standard deviations off the mean."

Consequently, we have a statistical definition or construct of disability. That is, a *disability* means being in the bottom 2%, particularly on measures such as intelligence tests. (The top 2% are *gifted*.) Psychologists can measure all sorts of human traits, such as social/emotional and behavioral functioning. In each case, they determine a norm and what is two standard deviations below the norm.

Statistically determining a disability rests on the validity of the tests used to measure different human qualities. Let's start with IQ testing. Do we agree on or even understand what *intelligence* means? If we could come to a consensus on what intelligence means and what kinds of questions we should ask to measure it, do those questions truly represent our construct? Even if the answer is yes, do our different backgrounds have an effect on how we might answer the questions? Do we know whether the number we come up with is an accurate representation of someone's intelligence? School psychologists are taught that there is standard error of measurement with which to view one particular score. Are there other variables that might affect the score? If one looks at the various models of intelligence and abilities (e.g., Cattell-Horn-Carroll, Kaufman, Sternberg, Wechsler), we can see that there is no one clear global construct of intelligence. We can, however, statistically validate what is normal and what is not—at least, on

certain attributes. Most individuals will have strengths and weaknesses but not as pronounced as they are in individuals with learning differences. However, many—if not all—of us wind up in the bottom 2% (or close to it) on something. There is a bottom 2% of husbands who lack mechanical aptitude. Two out of a hundred people rank at the bottom in terms of musical or artistic ability.

We do not define persons as disabled if their particular weakness does not

Henry's Story

When I teach an introductory special education course, students often ask a panel of deaf adults, "Don't you wish you could hear?" The students are always amazed when they hear, "No, because this is who I am and I cannot imagine being a different person." They cannot hear, but so what? They value their quality of life as well as a heightened awareness of other senses. To what extent is disability in the eye of the beholder? If an individual rejects the label of disability, we need to respect that decision. This is the core of personal autonomy. Everyone wants to feel empowered through a positive sense of self-identity.

"substantially limit one or more major life activities." This is the wording from the Americans with Disabilities Act (ADA). The federal government decides what constitutes a major life activity. School is considered to be a major life activity. (Some still argue that testing is a major life activity.) As much as we may think we agree on what major life activities are (e.g., education, vocation, communication, independence), why do we agree and do we always agree? This is where the notion of disability becomes a social and cultural construct. While not entirely arbitrary, major life activities are what society deems as important. In education, the 3Rs are important; music and art, not so much. A very successful artist with "learning disabilities" once told us, "If some people can't read or write or do mathematics but they can do art, they're learning disabled. But what about the people who can't do art or music, what are they labeled? They're not labeled anything."

The deaf community, in particular, has rejected the notion of disability. They do not have disabilities; they simply are people who use a different language than that of hearing people to communicate. Those of us who do not know sign language may have a disability in the eyes of deaf persons.

Why do we assume persons with disabilities should try to be somebody different? The "something's wrong/fix it" approach is based on an assumption that people with disabilities would prefer not to have disabilities. While this may be true in some cases, our experience has indicated quite the opposite. Ask yourself, "Do I want to be different from who I am at my very essence?" A central component of healthy self-autonomy is satisfaction and belief in oneself. As Beauchamp and Childress state,

The core idea of personal autonomy is to have personal rule of the self while remaining free from controlling interference by others. The autonomous person acts in accordance with a freely self-chosen and informed plan. A person of diminished autonomy, by contrast, is in at least some respects controlled by others or is incapable of deliberating or acting on the basis of his or her own plans. For example, institutionalized persons, such as prisoners or the mentally retarded, may have diminished autonomy. (1989, p. 68)

Perhaps, as humans, we are innately disposed to fear and reject any thing that is different. In many cases, we assuage our wariness of differences by calling them disabilities. It is a convenient way to marginalize those who do not quite fit our expectations of normal behavior. They may not have the same abilities or characteristics as the rest of us (although one has to wonder what attributes define us as being the same as each other), but we overstep when we classify those abilities as dis-: "a Latin prefix meaning 'apart,' 'asunder,' 'away,' 'utterly,' or having a privative, negative, or reversing force" (Random House Online Dictionary, 2013). The connotation of "negative" particularly stands out. An adult with profound dyslexia once said, "I went through a time where they were calling kids like me 'mentally retarded.' I don't even know what the other names were but they all came out being subhuman" (Reiff, Gerber, & Ginsberg, 1997). This individual, John Corcoran, is a multimillionaire contractor/developer who has been the subject of innumerable articles in prominent media and is a respected speaker on dyslexia.

The premise that disabilities are a weakness has led to a medical pathology model. The presumption that something is wrong with people that needs to be fixed or cured has a ring of arrogance and condescension. Disabilities represent diversity and differences along the continuum of human beings. Conceptualizing them as *deficient* brings us back to the stigma that many in education and human service professions have been challenging and fighting for years.

Identifying a learning disability can be laborious. The process usually involves filling out a vast amount of paperwork and waiting sometimes over a year for testing to occur. Then, detailed results are shared with teachers and parents. The report usually includes various generic strategies for helping the student be more successful in the classroom—not necessarily to maximize learning potential. The report leads to the creation of an IEP and more paperwork and meetings. Meanwhile, the student is left feeling disabled solely because she or he doesn't fit the traditional school structures and processes that haven't really changed for years. We sometimes overdiagnose and pin on labels as if we have some educational MRI. Plenty of students process

information differently to a point that it becomes a functional problem. If it is a problem, teachers should want to deal with it. Students with learning differences do not need to be "diagnosed" with a disability.

MOVING FORWARD

Almost 20 years ago, Pat Wolfe wrote about what we know from brain research that can be applied to education. At the time, the idea that IO is not fixed at birth and that the brain develops over time in relation to the environment was groundbreaking and should have had significant impact on how we teach children in our schools. Wolfe continues her work today through Mind Matters.

Others working to bring brain research into our classrooms include Sarah-Jayne Blackmore and Uta Frith, authors of *The Learning Brain*: Lessons for Education, and Eric Jensen, author of Teaching With the Brain in Mind. Even though their work should be game changing and impact core content in teacher training and professional development programs, it has not been sufficiently linked to educational policy and practice. Also over twenty years

The Bottom Line

Carol Hunter, an award-winning retired elementary school principal, is the author of Real Leadership Real Change and president of Impact Leadership, a consulting company focused on bringing real change to public education. She articulately expresses a bottom line on the use of the learning disabilities label:

For those who are comforted by labels and the certainty they provide, it is difficult to embrace the idea that we can unlock the potential of many of our students by determining how they learn. Once we decide that many diagnosed learning disabilities refer to having trouble in a school-based learning environment, we can move forward with defining individual learning styles, brain strengths and intelligences.

Carol also explains her viewpoint in more detail:

When I first became a principal in 1980, I was exposed to the work of Rita Dunne in the area of learning styles. Fortunately, I was working in a school system that truly empowered principals and teachers to do whatever it took to reach their students. In the site-based management model, the staff and community worked together to determine budget priorities, school organization, and programming. Rita Dunne's work that defined twenty-one elements of learning styles altered classroom practices accordingly. Students were allowed to listen to music, move around the classroom, doodle or fiddle during a lesson, eat while learning, choose more comfortable seating, and so on. Chaos did not reign. Teachers knew which of the twenty-one elements were significant for each child and guided them to choose accordingly. Results were incredible. Unfortunately, the current nod to learning styles focuses almost exclusively on visual, auditory, and kinesthetic learning—all necessary, but not sufficient.

ago, David Rose, the founder of the Center for Applied Special Technology, used brain research to apply universal design to education in his paradigm, UDL.

In 1983, Howard Gardner published *Frames of Mind: The Theory of Multiple Intelligences*. At that time, he identified seven intelligences: linguistic, logic-mathematical, musical, spatial, bodily/kinesthetic, interpersonal, and intrapersonal. In 1999, he added naturalistic and is informally considering two additional intelligences: existential and pedagogical. He has always cautioned that everyone has his or her own profile of intelligences and that an understanding of individual intelligences should be used to empower people, not to limit them. Understanding multiple intelligences theory allows teachers and administrators to believe in the importance of honoring each student as an individual and to consider the relatively narrow focus and limited value of standardized testing.

So why haven't these research-based game changers become common practice in our schools? Only now have we started to see mention of UDL in education as it is in the CCSS. Yet few teachers still understand what it means, and its discussion in the CCSS is not well articulated. There is a significant disconnect between research and policy and procedure and action. Education has traditionally been very slow to change. Rather, the pendulum swings back and forth from the basics to new programs in literacy and numeracy. We go from memorization of math facts to new math, from whole language to phonics, from emphasis on the arts to emphasis on science, from time for physical education to time for basics only. The pendulum moves faster these days, but the amplitude does not change.

We need a continuous improvement model based on new understandings and a constantly changing environment. We can change and be a bit more right in what we do. We can't think that we are wrong now and any change will make everything right. That's simply not the case. We must, however, keep up with the explosion of knowledge around us and even try to take the lead.

Through our experience as educators, researchers, and community members, we have developed a perspective that puts a premium on social justice, equity, and personal autonomy in the field of special education and the lives of people with what we call *disabilities*. Laws and policies attempt to provide social justice and equity, but legislation cannot guarantee or ensure these outcomes. As the saying goes, you cannot outlaw stupidity. On the other hand, it is our hope that we as professionals in the fields of education and human services can be effective advocates and champions of social justice and equity for all.

We question and challenge the semantics and the many underlying assumptions of the term *disability*. As a society, we have come a long way

in leveling the playing field. In this sense, much of the ethos of special education has made a significant contribution to social justice. Ironically, many persons with learning differences do not qualify for special services. Unrecognized by the system, they often live in a world that dismisses much of who they are simply because they are different. We have made and are making progress in assuring the civil rights of persons with disabilities. We worry about many students and adults who do not qualify for special education support and who face discrimination because they learn differently but have little recourse to accommodations and adjustments. In some instances, personal wealth affords these children the type of support they need outside of school hours. We encourage you to question the use of the term *disabilities*. By the end of this book, we hope you will acquire a healthy amount of intellectual curiosity, challenge conventional wisdom and the status quo, and be ready to take on the work that still needs to be done.